

Custodial, Labor and Trades Branch  
Maintenance and Plant Operation Group  
Water Series

E.P.W.U. PLANT TECHNICIAN I

4/99 (SAC)

### *Summary*

Under general supervision, operate, maintain and repair water or wastewater treatment systems and equipment.

### *Typical Duties*

Control water or wastewater treatment processes and equipment to remove solid materials, chemical compounds, and micro-organisms from water in compliance with state and federal permits. Involves: operating pumps, valves, and other processing equipment to move water or wastewater through various treatment processes; reading and interpreting meters and gauges to ensure plant equipment and processes are working within established operational ranges; activating or adjusting controls as needed to effect process control; taking water or wastewater samples at various stages of processing, testing and adding chemicals such as chlorine to water by predetermined formula; operating chemical-feeding devices, as required.

Maintain, repair and install various motors, pumps, bushings, drives, clarifiers, mixers, chlorinators, or similar treatment process equipment. Involves: checking equipment for proper operation and to detect faulty parts; using hand tools to replace bearings, sleeves, packing glands, oil columns, pumps, housings, shafts, spider bearings, pump bowls, or similar parts; checking electrical equipment for shorts, faulty wiring, loose connections, loss of power and overload; performing minor electrical or mechanical repairs including basic welding; lubricating plant equipment, cleaning and flushing sludge lines, washing or replacing filters and performing other required preventive maintenance; installing fire sprinkler systems and meters.

Perform other duties as assigned. Involves: substituting for supervisor during temporary absences by carrying out specifically delegated duties sufficient to sustain continuity of ordinary operations or services, and similarly substituting for coworkers; using computers to store sampling results, schedule and record maintenance activities, and produce reports.

### *Minimum Qualifications*

Training and Experience: Graduation from high school or G.E.D. and two (2) years experience maintaining and repairing mechanical equipment, such as large or industrial pumps, motors, or similar mechanisms, or in water or wastewater treatment plant operations; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Good knowledge of: operation, maintenance and repair of a various mechanical and electromechanical equipment; principles and procedures of water and wastewater treatment and process control, including: chlorination, sedimentation, biological treatment, and sludge treatment and disposal; chemicals and compounds used in water and wastewater treatment processes; safe work practices and procedures. Some knowledge of Federal, State and local water and wastewater treatment regulations.

Ability to: read and record data from gauges, graphs, dials and other measuring instruments; calculate required chemical dosages by applying data to formulas of treatment requirements, flow levels and concentration levels; perform mechanical and electrical repair work; establish and maintain effective working relationships with fellow employees; enforce and comply with safe working practices and procedures; maintain records and prepare reports.

Skill in the safe use and care of: common hand tools and instruments to sample and measure water quality.

*Physical Requirements:* Occasional lifting and carrying of heavy objects (50 - 100 pounds); exposure to chemicals, effluent or similar solutions; operating a motor vehicle through City traffic and working under all weather conditions.

*Special Requirements:* Work a rotating shift schedule including weekends and holidays.

*License and Certificates:* Texas "D" Water or Wastewater Certificate of Competency by completion of probation period, Texas "C: Water or Wastewater Certificate of Competency within 30 months of date of hire; Texas Class "C" Driver's License.

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Director of Personnel

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Department Head

**OFFICIAL**